

AREA: General Engineering Technology:
Civil Engineering Technology Specialization

DEGREE: Associate of Applied Science Degree

LENGTH: Four semesters (two-year) program

PURPOSE: This curriculum provides educational opportunities for those who seek employment in the construction industry, for those who desire to upgrade their knowledge or acquire practical skills in the field, and for those who wish to transfer and complete a bachelor of science degree in civil engineering technology.

OCCUPATIONAL OBJECTIVES: construction/building inspector, construction estimator, draftsman/designer, engineer's aide, engineering technician or other related positions

TRANSFER GUIDELINES: Graduates with appropriate course selection may qualify to enter civil engineering technology programs at selected universities. Students preparing for transfer must consult with their program advisors. Course selection is very important to assure junior status upon transfer. Potential transfer institutions include East Tennessee State University, North Carolina State University, Old Dominion University, Rochester Institute of Technology, West Virginia Institute of Technology and West Virginia University. Students interested in transferring to other institutions, including Virginia Tech, must determine transfer requirements of their intended destination school.

PROGRAM REQUIREMENTS: The curriculum is designed to integrate courses in civil engineering technology, mechanics, physics, general education, drafting, computers and technical electives. Students entering the program must have algebra I and geometry skills or be willing to improve those skills through developmental studies. The program may be completed on a part-time basis since courses are alternated between day and evening hours. Technical electives must be selected from an approved list available from the program advisor. Upon satisfactory completion of the four-semester curriculum, the graduate will be awarded the associate of applied science degree in general engineering technology with a civil engineering technology specialization. Transfer opportunities for associate of applied science degrees, if existing, are very specific in nature. Students enrolling in an applied science degree with plans to transfer should explore opportunities with their faculty advisor.

| Course# | Title | Credits |
|---------|-------|---------|
|---------|-------|---------|

First Semester

| | | |
|---------|---|-----------|
| ARC 130 | Materials and Methods of Construction | 3 |
| EGR 110 | Engineering Graphics | 3 |
| ENG 111 | College Composition I | 3 |
| MTH | Approved math elective ¹ | 3 |
| PED/HLT | Physical education (or health) | 2 |
| SDV 100 | College Success Skills | 1 |
| | Approved social science elective ² | 3 |
| | Total | 18 |

Second Semester

| | | |
|---------|---|-----------|
| ARC 221 | Architectural CAD Appl. Software I | 3 |
| CIV 225 | Soil Mechanics | 2 |
| CIV 226 | Soil Mechanics Lab | 1 |
| ENG 115 | Technical Writing | 3 |
| MTH | Approved math elective ¹ | 3 |
| | Approved programming/computer elective ³ | 3 |
| | Approved social science elective ² | 3 |
| | Total | 18 |

Third Semester

| | | |
|---------|--|-----------|
| CIV 171 | Surveying I | 3 |
| EGR 135 | Statics for Engineering Technology | 3 |
| EGR 206 | Engineering Economics | 3 |
| PHY 201 | General College Physics I | 4 |
| | Approved technical elective ³ | 3 |
| | Total | 16 |

Fourth Semester

| | | |
|---------|---|-----------|
| CIV 172 | Surveying II | 3 |
| EGR 136 | Strength of Materials | 3 |
| EGR 247 | Materials Lab | 1 |
| PHY 202 | General College Physics II | 4 |
| | Approved humanities elective ⁴ | 3 |
| | Approved technical elective ³ | 3 |
| | Total | 17 |

Program Total **69**

¹ Approved math electives: MTH 115 and 116, or MTH 163 and MTH 164, or MTH 213 and MTH 214 will fulfill the math requirements for the program. Developmental math courses may be required for students to build their math skills before taking any of the approved math electives. Students must take a math placement test to determine their math skill level.

² Students may select social science electives from the approved list on page 51.

³ Requires approval of program advisor.

⁴ Students may select humanities electives from the approved list on page 50.

